Billing Code: 5001-06

**DEPARTMENT OF DEFENSE** 

Office of the Secretary

[Transmittal No. 18-10]

**Arms Sales Notification** 

**AGENCY:** Defense Security Cooperation Agency, Department of Defense.

**ACTION:** Arms sales notice.

**SUMMARY:** The Department of Defense is publishing the unclassified text of an arms sales

notification.

FOR FURTHER INFORMATION CONTACT: Pamela Young, (703) 697-9107,

pamela.a.young14.civ@mail.mil or Kathy Valadez, (703) 697-9217, kathy.a.valadez.civ@mail.mil;

DSCA/DSA-RAN.

**SUPPLEMENTARY INFORMATION:** This 36(b)(1) arms sales notification is published to

fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996. The following is

a copy of a letter to the Speaker of the House of Representatives, Transmittal 18-10 with attached

Policy Justification.

Dated: April 16, 2018.

Shelly E. Finke,

Alternate OSD Federal Register Liaison Officer,

Department of Defense.

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#### DEFENSE SECURITY COOPERATION AGENCY

201 12TH STREET SOUTH, STE 203 ARLINGTON, VA 22202-5406

APR 0 3 2018

The Henorable Paul D. Ryan Speaker of the House U.S. House of Representatives Washington, DC 20515

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control

Act, as amended, we are forwarding herewith Transmittal No. 18-10, concerning the Air Force's

proposed Letter(s) of Offer and Acceptance to the Government of Slovakia for defense articles

and services estimated to cost \$2.91 billion. After this letter is delivered to your office, we plan
to issue a news release to notify the public of this proposed sale.

Sincerely/

Charles W. Hoopet Lieutenant General, USA

Director

Enclosures:

1. Transmittal

2. Policy Justification

3. Sensitivity of Technology



#### Transmittal No. 18-10

# Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

- (i) Prospective Purchaser: Government of Slovakia
- (ii) Total Estimated Value:

Major Defense Equipment\* \$2.01 billion
Other \$ .90 billion
TOTAL \$2.91 billion

(iii) Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:

Major Defense Equipment (MDE):

Fourteen (14) F-16 Block 70/72 V Configuration Aircraft

Fifteen (15) M61 Vulcan 20mm Gun

Sixteen (16) F-16V F110 General Electric Engine or F100 Pratt & Whitney Engine (includes 2 spares)

Sixteen (16) APG-83 Active Electronically Scanned Array (AESA) Radar (includes 2 spares)

Fourteen (14) Modular Mission Computers

Fourteen (14) Link-16 Multifunctional Information Distribution System – JTRS

Sixteen (16) LN260 Embedded Global Positioning Service Inertial Navigation System (EGI) (includes 2 spares)

Fourteen (14) Improved Programmable Display Generator (iPDG)

Thirty (30) AIM-120C7 Missiles

Two (2) Guidance Sections for AIM-120C7

One Hundred (100) AIM-9X Missiles

Twelve (12) AIM-9X Captive Air Training Missile (CATM)

Twelve (12) AIM-9X CATM Guidance Units

Twelve (12) AIM-9X Tactical Guidance Units

Two hundred twenty-four (224) MAU-209C/B or MAU-169D Computer Control Group (CCG) for GBU-12 Paveway II 500lb Guided Bombs

Two hundred twenty-four (224) MXU-650/B Airfoil Group for GBU-12

Twenty (20) MAU-210 Enhanced CCG for Enhanced Paveway II (GBU-49)

Twenty (20) MXU-650 Airfoil Group for GBU-49

One hundred-fifty (150) KMU-572F/B Guidance Kit for Joint Direct Attack Munition (JDAM) 500lb Guided Bomb (GBU-38)

Sixty (60) LAU-129 Guided Missile Launcher

Thirty-six (36) MK-82 or BLU-111 500lb Inert Fill Bomb

Four hundred (400) MK-82 or BLU-111 500lb Bomb Bodies

Four hundred (400) FMU-152 Joint Programmable Fuze

Six (6) AN/AAQ-33 Sniper Pods

### Non-MDE:

Also included are fourteen (14) Joint Helmet Mounted Cueing System II; fourteen (14) AN/ALQ-213 Electronic Warfare Management Systems; sixteen (16) AN/ALQ-211 Advanced Integrated Defensive Electronic Warfare Suites; sixteen (16) AN/ALE-47 Countermeasure Dispensers; Advanced Identification Friend or Foe (AIFF), Secure Communications and Cryptographic Appliques; Joint Mission Planning System (JMPS); ground training device (flight simulator); Electronic Combat International Security Assistance Program (ECISAP) support; software and support; facilities and construction support; spares and repair/replace parts; personnel training and training equipment; publications and technical documentation; missile containers; DSU-38A/B Laser Illuminated Target Detector (GBU-54); munition support and test equipment; aircraft and munition integration and test support; studies and surveys; U.S. Government and contractor technical, engineering and logistical support services; and other related elements of logistics and program support.

- (iv) Military Department: Air Force (LO-D-SAA); (LO-D-TAA) and Navy (LO-P-LAH)
- (v) Prior Related Cases, if any: None
- (vi) Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid: None
- (vii) Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold: See Attached Annex
- (viii) Date Report Delivered to Congress: April 3, 2018

<sup>\*</sup>As defined in Section 47(6) of the Arms Export Control Act.

#### POLICY JUSTIFICATION

Slovakia – F-16 Block 70/72 V Configuration Aircraft

The Slovak Republic has requested to buy fourteen (14) F-16 Block 70/72 V configuration aircraft; up to sixteen (16) F-16 F110 General Electric or F100 Pratt & Whitney engines (MDE); fifteen (15) M61 A1 Vulcan 20mm Guns (MDE); sixteen (16) APG-83 Active Electronically Scanned Array (AESA) Radars (MDE); fourteen (14) Modular Mission Computers (MDE); fourteen (14) LINK-16 (MIDS-JTRS) secure communication systems (MDE); sixteen (16) LN260 EGI Embedded Global Positioning System Inertial Navigation Systems (EGI) (MDE); fourteen (14) Joint Helmet Mounted Cueing Systems (MDE); fourteen (14) Improved Programmable Display Generators (iPDGs) (MDE); thirty (30) AIM-120C7 air-to-air missiles, one hundred (100) AIM-9X air-to-air missiles; twelve (12) AIM-9X Captive Air Training Missiles, two (2) AIM-120C7, twenty-four (24) AIM-9X additional guidance units; two hundred twenty-four (224) each Computer Control Groups and Airfoil Groups for GBU-12 Paveway II 5001b Guided Bomb Kits; twenty (20) Enhanced Computer Control Groups for Enhanced Paveway II (GBU-49); one hundred fifty (150) KMU-572F/B Guidance Kits for Joint Direct Attack Munition (JDAM) 5001b Guided Bomb (GBU-38); sixty (60) LAU-129 Guided - Missile Launchers; thirty-six (36) MK-82 or BLU-111 5001b Inert Fill Bomb; four hundred (400) MK-82 or BLU-111 5001b Bomb Bodies; four hundred (400) FMU-152 Joint Programmable Fuzes; and six (6) AN/AAQ-33 Sniper Pods. Also included are fourteen (14) Joint Helmet Mounted Cueing System II; fourteen (14) AN/ALQ-213 Electronic Warfare Management Systems; sixteen (16) AN/ALQ-211 Advanced Integrated Defensive Electronic Warfare Suites; sixteen (16) AN/ALE-47 Countermeasure Dispensers; Advanced Identification Friend or Foe (AIFF), Secure Communications and Cryptographic Appliques; Joint Mission Planning System (JMPS); ground training device (flight simulator); Electronic Combat International Security Assistance Program (ECISAP) support; software and support; facilities and construction support; spares and repair/replace parts; personnel training and training equipment; publications and technical documentation; missile containers; DSU-38A/B Illuminated Target Detector (GBU-54); munition support and test equipment; aircraft and munition integration and test support; studies and surveys; U.S. Government and contractor technical, engineering and logistical support services; and other related elements of logistics and program support. The estimated total cost is \$2.91 billion.

This proposed sale will support the foreign policy and national security of the United States by helping to improve the security of a NATO partner that is an important force for ensuring peace and stability in Europe. The proposed sale will support Slovakia's needs for its own self-defense and support NATO defense goals. Slovakia intends to use these F-16s to modernize its Air Force and strengthen its homeland defense.

Slovakia intends for these aircraft to replace its current fleet of MiG-29s. Slovakia's current fighters are not interoperable with U.S forces or regional allies. Purchase of the F-16V will provide Slovakia with fourth generation fighter aircraft capability that is interoperable with the United States and NATO.

The proposed sale of new F-l 6V's to Slovakia will not impact the regional balance of power.

The prime contractor will be Lockheed Martin, headquartered in Bethesda, Maryland. There are no known offset agreements in conjunction with this sale, however, we expect Slovakia to request some amount of industrial participation. Any offset agreement will be defined in negotiations between the purchaser and the contractor.

Implementation of this proposed sale may require assignment of a small number of U.S. Government representatives (less than 10) and a modest number of contractor representatives (less than 50) to Slovakia. It is likely that no permanent U.S. persons will actually be required in country.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

#### Transmittal No. 18-10

# Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

## Annex Item No. vii

## (vii) Sensitivity of Technology:

- 1. This sale involves the release of sensitive technology to Slovakia. The F-16 V Block 70/72 weapon system is UNCLASSIFIED, except as noted below. The aircraft uses the F16 airframe, and features advanced avionics and systems. It contains the General Electric F110 engine or Pratt & Whitney Fl00 engine, AN/APG-83 radar, digital flight control system, internal and external electronic warfare (EW) equipment, Advanced Identification Friend or Foe (AIFF), LINK-16 datalink, operational flight trainer, and software computer programs.
- 2. The AN/APG-83 is an Active Electronically Scanned Array (AESA) radar upgrade for the F-16. It includes higher processor power, higher transmission power, more sensitive receiver electronics, and synthetic aperture radar (SAR), which creates higher-resolution ground maps from a greater distance than existing mechanically scanned array radars (e.g., APG-68). The upgrade features an increase in detection range of air targets, increases in processing speed and memory, as well as significant improvements in all modes. The highest classification of the radar is SECRET.
- 3. AN/ALQ- 211 AIDEWS provides passive radar warning, wide spectrum radio frequency jamming, and control and management of the entire EW system. The commercially developed system software and hardware is UNCLASSIFIED. The system is classified SECRET when loaded with a U.S. derived EW (threat) database.
- 4. The AN/APX-126 AIFF is a system capable of transmitting and interrogating via Mode 5. It is UNCLASSIFIED unless Mode 4 or Mode 5 operational evaluator parameters are loaded in to the equipment. Classified elements of the AIFF system include software object code, operating characteristics, parameters, and technical data.
- 5. The Embedded GPS-INS (EGI) LN-260 is a sensor that combines GPS and inertial sensor inputs to provide accurate location information for navigation and targeting. The EGI LN- 260 is UNCLASSIFIED. The GPS crypto-variable keys needed for highest GPS accuracy are classified up to SECRET.
- 6. Multifunctional Information Distribution System (MIDS) is an advanced Link-16 command, control, communications, and intelligence (C3I) system incorporating high-capacity, jamresistant, digital communication links for exchange of near real-time tactical information, including both data and voice, among air, ground, and sea elements. The MIDS terminal

hardware, publications, performance specifications, operational capability, parameters, vulnerabilities to countermeasures, and software documentation are classified CONFIDENTIAL. The classified information to be provided consists of that which is necessary for the operation, maintenance, and repair (through intermediate level) of the data link terminal, installed systems, and related software.

- 7. Joint Helmet Mounted Cueing System (JHMCS II) is a modified HGU-55/P helmet that incorporates a visor-projected Heads-Up Display (HUD) to cue weapons and aircraft sensors to air and ground targets. This system projects visual targeting and aircraft performance information on the back of the helmet's visor, enabling the pilot to monitor this information without interrupting his field of view through the cockpit canopy. This provides improvement for close combat targeting and engagement. Hardware is UNCLASSIFIED; technical data and documents are classified up to SECRET.
- 8. The Improved Programmable Display Generator (iPDG) and color multifunction displays utilize ruggedized commercial liquid crystal display technology that is designed to withstand the harsh environment found in modern fighter cockpits. The display generator is the fifth generation graphics processor for the F-16. Through the use of state-of-the-art microprocessors and graphics engines, it provided orders of magnitude increases in throughput, memory, and graphics capabilities. The hardware and software are UNCLASSIFIED.
- 9. GBU-12 Paveway II (PW II), a Laser Guided Bomb (LGB), is a maneuverable, free-fall weapon that guides to a spot of laser energy reflected off of the target. The LGB is delivered like a normal general purpose (GP) warhead but the weapon guides to the laser spot to the target. Laser designation for the weapon can be provided by a variety of laser target designators. A LGB consists of a Computer Control Group (CCG) with laser detector sensor and a warhead specific Air Foil Group (AFG) that attaches to the nose and tail of a GP bomb body respectively. The GBU-12 is a 500lbs (MK-82 or BLU-111) GP bomb body fitted with the MXU-650 AFG, and MAU-209C/B or MAU-169D CCG to guide to its laser designated target. The hardware is UNCLASSIFIED; technical data and documents are classified up to CONFIDENTIAL.
- 10. GBU-49 Enhanced Paveway II (EP II), a LGB, is a maneuverable, free-fall weapon that guides to the target using a GPS-aided INS and dual mode laser. The EP II consists of a CCG with laser detector sensor, and a warhead specific AFG that attaches to the nose and tail of a GP bomb body. The GBU-49 is a 5001bs (MK-82 or BLU-111) GP bomb body fitted with the MXU-650 AFG and MAU-210 CCG to guide to its laser designated target. The hardware is UNCLASSIFIED; technical data and documents are classified up to CONFIDENTIAL without a Height of Burst (HOB) capability.
- 11. GBU-38 Joint Direct Attack Munition (JDAM) consists of a guidance tail kit that converts unguided free-fall general purpose bombs into accurate, adverse weather "smart" munitions. With the addition of a new tail section that contains an inertial navigational system and a global positioning system guidance control unit, JDAM improves the accuracy of unguided, general-purpose bombs in any weather condition. JDAM can be launched from very low to very high altitudes in a dive, toss and loft, or in straight and level flight with an on-axis or off-

axis delivery. JDAM enables multiple weapons to be directed against single or multiple targets on a single pass. The GBU-38 consists of a warhead specific air foil group and a MK-82, BLU-111, or BLU-126 GP bomb body. The JDAM as an All Up Round and all of its components are UNCLASSIFIED, technical data and documents for JDAM are classified up to SECRET.

- 12. The GBU-54 Laser JDAM (LJDAM) is a variant of the JDAM when combined with a DSU-38 A/B Laser Sensor that uses both the BGPS and/or Laser guidance to guide a weapon into a target. The GBU-54 consists of a warhead specific AFG, DSU-38 Laser Sensor, and a MK-82 or BLU-111 bomb body. The LJDAM as an All Up Round and all of its components are UNCLASSIFIED, technical data and documents for LJDAM are classified up to SECRET.
- 13. FMU-152 is the Joint Programmable Bomb Fuze; a multi-function hard/soft target fuze that is used on for multiple different Mk-series bombs. The fuze can be programmed on the wing or in flight and is used with the JDAM, Paveway, and Enhanced Paveway bombs. The hardware is UNCLASSIFIED; technical data and documents are UNCLASSIFED.
- 14. AIM-120C7 Advanced Medium Range Air-to-Air Missile (AMRAAM) is guided missile featuring digital technology and micro-miniature solid-state electronics. AMRAAM capabilities include look-down/shoot-down, multiple launches against multiple targets, resistance to electronic countermeasures, and interception of high- and low-flying and maneuvering targets. The AMRAAM All Up Round is classified CONFIDENTIAL; major components and subsystems range from UNCLASSIFIED to CONFIDENTIAL. Technical data and other documentation are classified up to SECRET.

The AIM-120C7 is launched from the aircraft using a LAU-129 guided missile launcher. The LAU-129 provides mechanical and electrical interface between missile and aircraft. The LAU-129 system is UNCLASSIFIED.

- 15. AIM-9X 11 SIDEWINDER missile is an air-to-air guided missile that employs a passive infrared (1R) target acquisition system that features digital technology and micro-miniature solid state electronics. The AIM-9X II All Up Round is CONFIDENTIAL, major components and subsystems range from UNCLASSIFIED to CONFIDENTIAL, and technical data and other documentation are classified up to SECRET. The AIM- 9X tactical and Captive Air Training Missile guidance units and Tactical Units are subsets of the overall missile.
- 16. M61 20mm Vulcan Cannon: The 20 mm Vulcan cannon is a six barreled automatic cannon chambered in 20x 120mm with a cyclic rate of fire from 2,500-6,000 shots per minute. This weapon is a hydraulically powered air cooled gatling gun used to damage/destroy aerial targets, suppress/incapacitate personnel targets and damage or destroy moving and stationary light materiel targets. The M61 and its components are UNCLASSIFIED.
- 17. The SNIPER (AN/AAQ-33) targeting system is UNCLASSIFIED and contains technology representing the latest state-of-the-art in in electro-optical clarity and haze, and

low light targeting capability. Information on performance and inherent vulnerabilities is classified SECRET. Software (object code) is classified CONFIDENTIAL. Overall system classification is SECRET.

- 18. This sale will also involve the release of sensitive and/or classified cryptographic equipment for secure communications radios, precision navigation with anti-jam capability, and cryptographic appliques and keying equipment. The hardware is UNCLASSIFIED, except where systems are loaded with cryptographic software, which may be classified up to SECRET.
- 19. Software, hardware, and other data or information, which is classified or sensitive, is reviewed prior to release to protect system vulnerabilities, design data, and performance parameters. Some end-item hardware, software, and other data identified above are classified at the CONFIDENTIAL and SECRET level. Potential compromise of these systems is controlled through management of the basic software programs of highly sensitive systems and software-controlled weapon systems on a case-by-case basis.
- 20. If a technologically advanced adversary were to obtain knowledge of the specific hardware or software source code in this proposed sale, the information could be used to develop countermeasures which might reduce weapon system effectiveness or be used in the development of systems with similar or advance capabilities. The benefits to be derived from this sale in the furtherance of the US foreign policy and national security objectives, as outlined in the Policy Justification, outweigh the potential damage that could result if the sensitive technology were revealed to unauthorized persons.
- 21. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification. Moreover, the benefits to be derived from this sale, as outlined in the Policy Justification, outweigh the potential damage that could result if the sensitive technology were revealed to unauthorized persons.
- 22. All defense articles and services listed in this transmittal are authorized for release and export to the Government of Slovakia.

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